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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,332	12/05/2003	Joseph Kwak	I-2-0453.1US	1134

24374 7590 08/07/2006

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EXAMINER

NGUYEN, SIMON

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/729,332

Applicant(s)

KWAK ET AL.

Examiner

SIMON D. NGUYEN

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 44-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 44-46, 49, 52-55, 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCune, Jr. (6,850,736) in view of Cutcher et al. (20040203403).

Regarding claim 44, McCune, Jr. discloses a method for determining a received signal strength (abstract), comprising: determining a signal level of a carrier frequency (signal strength); determining S/N and interference histogram (predetermined noise level); deriving the parameter representing a S/N and interference value (abstract, (column 3 lines 1-45, figs.4-9, column 9 line 40 to column 10 line 10). However, McCune does not specifically disclose obtain the RSSI value at an antenna connector.

Cutcher discloses a RSSI (a first value) measured at an antenna connector (paragraphs 4,16), wherein the RSSI level is the sum of both a desired signal power and an interference power (paragraph 5). The RSSI measurement then compares to one predetermined interference threshold value T1, T2, T3 (as noise and interference histogram) (considering as a second value) to determine what state the transceiver's attenuator is set (as the step of deriving the parameter) (abstract, figs. 1-2, paragraphs

4-5, 16-21). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have McCune, modified by Cutcher to measure the RSSI at the antenna in order to determine if an input signal should be attenuated.

Regarding claim 53, this claim is rejected for the same reason as set forth in claim 1 as apparatus of method claim 1.

Regarding claims 45-46, 54-55, Cutcher further discloses the histogram is a received power indicator histogram (first, second, and third threshold levels are predetermined power level references which is considered as the received power indicator histogram), and wherein the parameter is scaled value of the S/N and the interference value (paragraphs 16-18, fig.2).

Regarding claims 49, 52, 58, Cutcher discloses the parameter represents the S/N at the antenna connector or other different points (paragraph 16).

3. Claims 47-48, 50-51, 56-57, 59-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCune, Jr. (6,850,736) in view of Cutcher et al. (20040203403) as applied to claim 44, and further in view of Runzo (2003/0022645).

Regarding claims 47, 56, the modified McCune fail to teach 8-bit unsigned value.

Runzo disclose a method and apparatus for determining scaled value parameter of the S/N plus interference, wherein the parameter is an eight-bit value (paragraph 42, abstract, figs.4A-E, 5). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have modified McCune, modified by Runzo in order to have enough digit to strongly indicate the parameter value.

Regarding claims 48, 57, McCune further discloses the parameter value increases with increasing S/N and interference (figs. 4-5, 7).

Regarding claims 50-51, 59-60, Runzo further discloses the signal strength is measured after a RF/ down converter and after post processing (at an IF detector 94)(paragraph 42, fig.3).

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (571) 272-7894. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (571) 272-7899.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

600 Dulany, Alexandria, VA 22314

Or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Hand-delivered response should be brought to Knox building,

501 Dulany, Alexandria, VA.

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Art Unit: 2618

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Simon Nguyen

July 31, 2006

A handwritten signature in black ink, appearing to read 'S. Nguyen', with a stylized, cursive script.

SIMON NGUYEN
PRIMARY EXAMINER